

eSmart3 MPPT 12/24/36/48V 20A 30A 40A 50A 60A [solar mppt controller](#)





MPPT Solar Controller 12V24V36V48V 20A-40A



Features

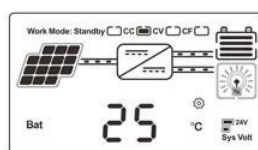
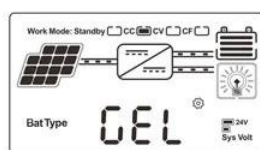
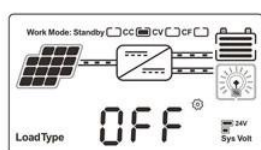
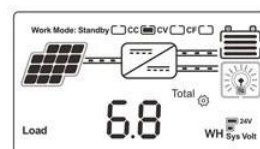
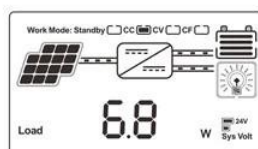
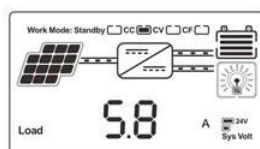
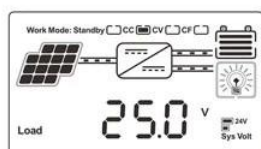
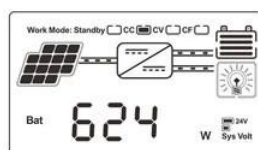
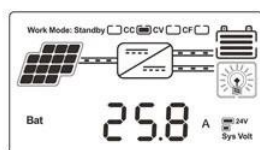
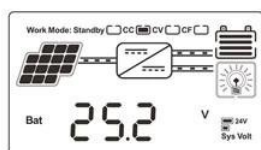
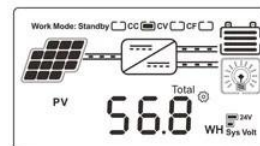
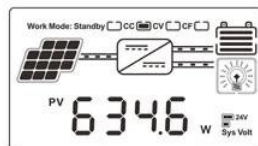
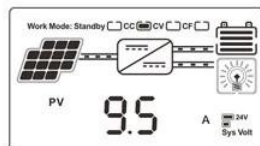
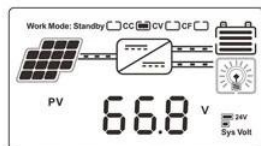
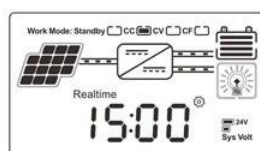
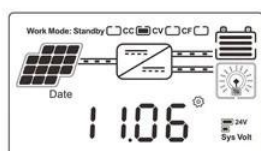
- 1.It has an efficient MPPT algorithm, MPPT efficiency $\geq 99.5\%$ and converter efficiency up to 98%.
- 2.Charge mode: three stages (constant current, constant voltage, floating charge), it prolongs service life of the batteries.
- 3.Four types of load mode selection: ON/OFF, PV voltage control, Dual Time control, PV+Time control .
- 4.Battery system voltage automatic recognition.
- 5.Three kinds of commonly used lead-acid battery (Seal\Gel\Flooded) parameter settings fcan be selected by the user, and the user can also customize the parameters for other battery charging.
- 6.It has a current limiting charging function. When the power of PV is too large, the controller automatically keeps the charging power, and the charging current will not exceed the rated value.
- 7.High definition LCD display function to check the device running data and working status, also can support modify the controller display parameter.
- 8.RS485 communication, we can offer communication protocol to convenient user's integrated management and secondary development.
- 9.Support PC software monitoring and WiFi module to realize APP cloud monitoring.
- 10.CE, RoHS, FCC certifications approved, we can assist clients to pass various certifications.
- 11.2 years warranty, and 2~10 years extended warranty service also can be provided.

[MPPT Controller](#) connection diagram

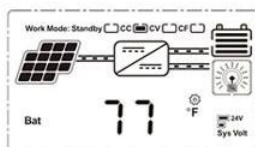
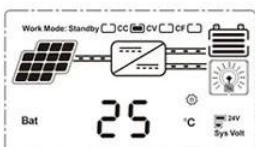
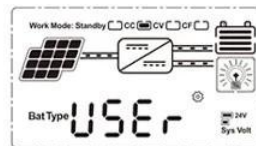
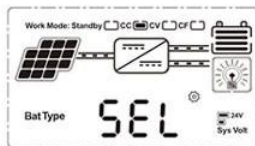
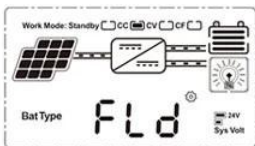
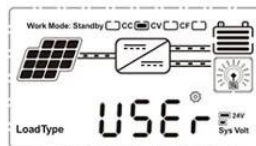
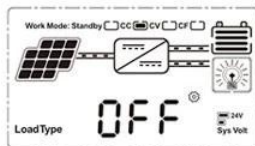
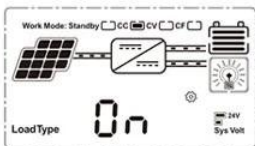
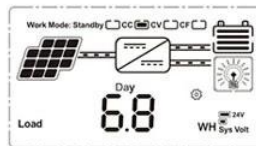
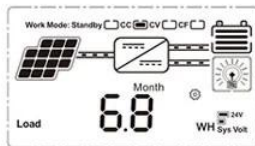
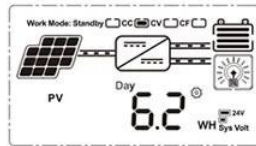
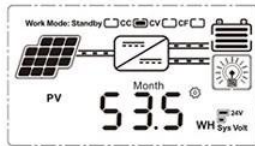
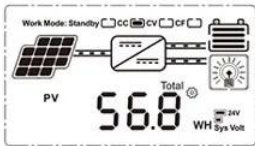
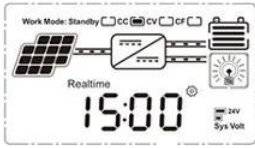
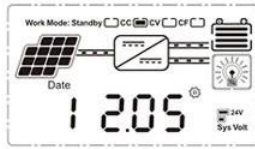
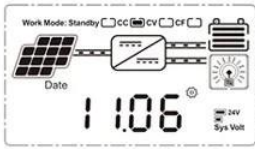
Off Grid Solar System CPU



Parameters Display & Setting information



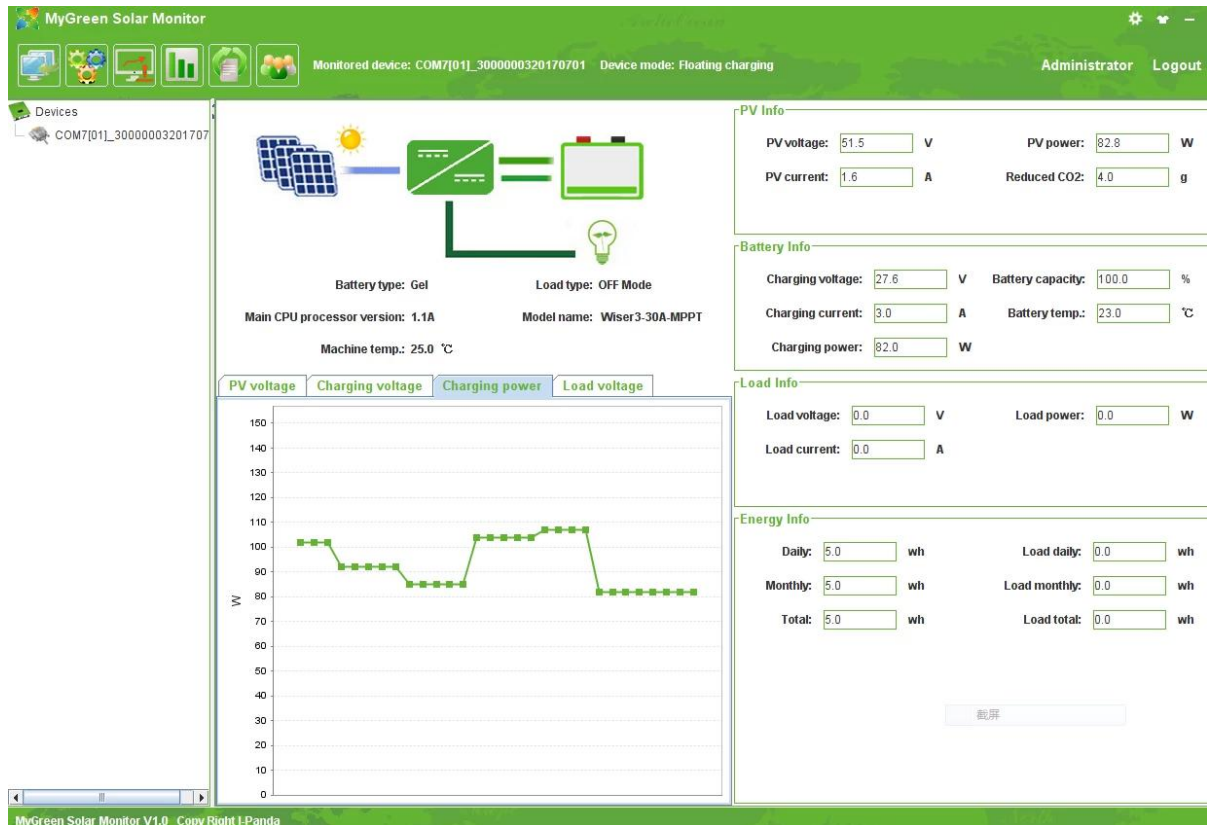
LCD display information



| | | | |
|------|-------------|-----|------------|
| On | Mean "ON" | FLD | Mean "FLD" |
| OFF | Mean "OFF" | GEL | Mean "GEL" |
| USER | Mean "USER" | SEL | Mean "SEL" |

Set the battery type and LOAD control mode

Upper Computer Software & Test Software



PC software_SolarEagle

Visual display of charge and discharge status, PV voltage, charge voltage, charge current, and can set the battery type, LOAD output control;

Parameter

| eSmart3 series | | 20A | 30A | 40A | 50A | 60A |
|-------------------------|------------------------------------|--|-------|-------|-------|-------|
| Product category | Controller Properties | MPPT (maximum power point tracking) | | | | |
| | MPPT efficiency | ≥99.5% | | | | |
| | Standby power | 0.5W~1.2W | | | | |
| | System voltage | Automatic recognition | | | | |
| | Heat-dissipating method | Intelligent fan cooling | | | | |
| Input Characteristics | Max.PV input voltage(VOC) | DC150V | | | | |
| | Low input voltage protection point | Battery voltage + 2V | | | | |
| | Over voltage protection point | DC150V | | | | |
| | Rated PV power | 12V system | 260W | 390W | 520W | 650W |
| | | 24V system | 520W | 780W | 1040W | 1300W |
| | | 36V system | 780W | 1170W | 1560W | 1950W |
| | | 48V system | 1040W | 1560W | 2080W | 2600W |
| Charge Characteristics | Selectable Battery Types | Sealed lead acid, Gel battery, Flooded | | | | |
| | (Default Gel battery) | (Other types of the batteries also can be defined) | | | | |
| | Charge rated current | 20A | 30A | 40A | 50A | 60A |
| | Charge Method | 3-Stage: constant current(fast charging)-constant voltage-floating charge | | | | |
| LOAD Characteristics | Load voltage | The same as the battery voltage | | | | |
| | Load rated current | 40A 60A | | | | |
| | Load control mode | On/Off mode, PV voltage control mode, Dual-time control mode, PV + Time control mode | | | | |
| Display & Communication | Display mode | High-definition LCD segment code backlight display | | | | |
| | Communication mode | 8-pin RJ45 port/RS485/support PC software monitoring/support WiFi module to realize APP cloud monitoring | | | | |

| | | | |
|------------------|------------------------|--|-------------|
| Other Parameters | Protect function | Input-output over \ under voltage protection, Prevention of connection reverse protection,battery shedding protection etc. | |
| | Operation Temperature | -20°C~+50°C | |
| | Storage Temperature | -40°C~+75°C | |
| | IP(Ingress protection) | IP21 | |
| | Max. connection size | 20mm2 | 30mm2 |
| | Net Weight (kg) | 2.3 | 2.6 |
| | Gross Weight (kg) | 3 | 3.5 |
| | Product Size[mm] | 240*168*66 | 270*180*85 |
| | Packing Size(mm) | 289*204*101 | 324*223*135 |
| | | | |